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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/838,745 | 04/19/2001 | Donald J. Kadyk | 13768.170 | 9353 |

47973 7590 11/19/2004

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| EXAMINER |
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KLIMACH, PAULA W

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| ART UNIT | PAPER NUMBER |
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2135

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/838,745

Applicant(s)

KADYK ET AL.

Examiner

Paula W Klimach

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers


- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/21/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-60 are rejected under 35 U. S. C. 103 (a) as being unpatentable over Bellwood in view of Stallings.

In reference to claims 1, 14, 35, and 48, Bellwood discloses a system and method for participating in a secure communication between a client and a set of servers by establishing a first secure session between the client and the proxy and then a second session, using the second session the client request the connection to the server (abstract). The method disclosed by Bellwood comprises receiving a request from the client system for a secure connection between the client system and the proxy system (column 5 lines 30-31); establishing a secure connection between the client and proxy systems (column 5 lines 32-52); receiving a request from the client system for a secure end-to-end connection with the server system (column 6 lines 10-11); and forwarding the client system request for a secure end-to-end connection to the server system (column 6 lines 11-15).

Although the server discloses decrypting, encrypting, and modifying the communications between the server and the client (column 6 lines 1-9 and lines 11-30) and the secure end-to-end connection is encapsulated within the insecure client-proxy connection, i.e. tunneling (column 5 lines 54-65), Bellwood does not expressly disclose downgrading the secure connection between

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the client system and the proxy system to be insecure after the secure end-to-end connection is established.

Downgrading the secure connection between the client and the system is using a less secure method of communication after having used a secure form. Stalling discloses a system wherein the Key Distribution Center sends the communications to the Initiator in a secure form by encrypting using the key K_a and then re-encrypting the ID_b and K_s using K_b . The Initiator A performs the decryption and sends the Responder B ID_a and K_s in a downgraded less secure communication encrypted using only K_b (page 144).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to downgrade the security between the two devices as is performed between the Initiator A and the Responder B as disclosed by Stallings in the proxy and client respectively of the system disclosed by Bellwood. One of ordinary skill in the art would have been motivated to do this because the client may then use the greater computational power of the proxy to communicate with the server and thus reduce the price of producing the client devices.

In reference to claim 27 Bellwood discloses a system and method for participating in a secure communication between a client and a set of servers by establishing a first secure session between the client and the proxy and then a second session, using the second session the client request the connection to the server (abstract). Bellwood discloses a system and method that comprises negotiating a secure connection between the client and proxy systems; negotiating a secure end-to-end connection between the client and the server system using the secure client-proxy connection (column 5 lines 40-65); and altering the secure client-proxy connection so that it is no longer secure (column 7 line 64 and column 8 line 6).

Although Bellwood discloses tunneling and therefore encapsulating the client-server communication within client proxy communication (column 5 lines 40-65), Bellwood does not expressly disclose a secure end-to-end connection within the insecure client-proxy connection.

Stalling discloses a system wherein the Key Distribution Center sends the communications to the Initiator in a secure form by encrypting using the key K_a and then re-encrypting the ID_a and K_s using K_b . The Initiator A performs the decryption and sends the Responder B ID_a and K_s in a downgraded less secure communication encrypted using only K_b (page 144).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to downgrade the security between the proxy and client of Bellwood as in the system disclosed by Stallings. One of ordinary skill in the art would have been motivated to do this because the client may then use the greater computational power of the proxy to communicate with the server and thus reduce the price of producing the client devices.

In reference to claims 2, 15, 28, 36, and, 49, further comprising the acts of issuing an authenticate challenge to the client system; and receiving, over the secure client-proxy collection, proper authentication credentials from the client system (Fig. 4 session I and message 6).

In reference to claims 3, 16, 37, and, 49, wherein the authenticate challenge issued to the client system is one of a basic and a digest authenticate challenge (column 5 lines 15-29).

In reference to claims 4, 17, 30, and 39, wherein at least one of the secure client-proxy connection and the secure end-to-end connection is certificate based (Fig. 4).

In reference to claims 5, 18, 31, 40, and 53, wherein at least one of the secure client-proxy connection and the secure end-to-end connection is one of a secure sockets layer and a transport layer security connection (column 3 lines 50-67).

In reference to claims 6, 19, 29, 38, and 51, further comprising the act of sending a certificate to the client system, wherein the certificate may be used to verify the identity of the proxy system (column 5 lines 40-52).

In reference to claims 7, 20, 41, 52, and 54, further comprising the act of receiving proper authentication credentials from the client system, wherein the proper authentication credentials received from the client system are certificate based.

In reference to claims 8, 21, 42, and, 55, further comprising the act of transferring data between the client system and the server system through the secure end-to-end connection (column 5 lines 58-65).

In reference to claims 9, 22, 32, 43, and 56, wherein downgrading the secure connection between the client system and the proxy system to be insecure comprises the act of setting the cipher set for the connection to be a null cipher. Stallings discloses the messaging wherein the amount of encryption is down graded which performs the function of the connection being a null cipher (page 144).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to downgrade the security between the proxy and client of Bellwood as in the system disclosed by Stallings. One of ordinary skill in the art would have been motivated to do this because the client may then use the grater computational power of the proxy to communicate with the server and thus reduce the price of producing the client devices.

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In reference to claims 10, 23, 33, 44, and 57, wherein the request for a secure end-to-end connection comprises a hypertext transfer protocol connect request (column 6 lines 10-11).

In reference to claims 11, 24, 45, and 58, wherein the server system comprises one of a reverse proxy server system and a forward proxy system (Fig. 4).

In reference to claims 12, 25, 46, and 59, wherein at least one connection is over the Internet (Fig. 2).

In reference to claims 13, 26, 34, 47, and 60, wherein the server system comprises a cascaded proxy system, the server system allowing Secure connections, insecure connections, or both secure and insecure connections, with one or more other server systems (Fig. 4).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paula W Klimach whose telephone number is (571) 272-3854. The examiner can normally be reached on Mon to Thr 9:30 a.m to 5:30 p.m.

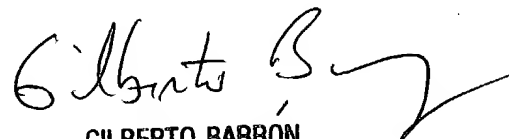
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PWK

Monday, November 15, 2004



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